

ABSTRACT

[0070] A pixel cell comprises a photo-conversion device for generating charge and a gate controlled charge storage region for storing photo-generated charge under control of a control gate. The charge storage region can be a single CCD stage having a buried channel to obtain efficient charge transfer and low charge loss. The charge storage region is adjacent to a gate of a transistor. The transistor gate is adjacent to the photo-conversion device and, in conjunction with the control gate, transfers photo-generated charge from the photo-conversion device to the charge storage region.